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Grounded Theory: A Guide for Exploratory Studies in Management Research

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Abstract

Grounded theory was first introduced more than 50 years ago, but researchers are often still uncertain about how to implement it. This is not surprising, considering that even the two pioneers of this qualitative design, Glaser and Strauss, have different views about its approach, and these are just two of multiple variations found in the literature. While studies using grounded theory in management research are becoming more popular, these are often mixed with the case study approach, or they provide contradictory guidelines on how to use it. The aim of this paper is to provide a clear guide for researchers who wish to use grounded theory in exploratory studies in management research. To support this goal, the methodology's different terms and variations, as found in the literature, are also discussed. This study can support researchers using this methodology, but it is also useful for reviewers and examiners who wish to understand more about it and the different ways in which researchers have implemented it.

Keywords

Glaserian GT, grounded theory, methods in qualitative inquiry, interpretive phenomenology, secondary data analysis

Introduction: The Need for a Guide to Grounded Theory Methodology

Even though there is no single approach to grounded theory (GT), and the methodology has undergone many changes since it was first introduced by Glaser and Strauss in 1967 (Cho & Lee, 2014; Easterby-Smith et al., 2002), it has become the leading qualitative approach across various disciplines (Bryant & Charmaz, 2007, as citied in Walsh et al., 2015). Qualitative research has also seen constant growth since the introduction of GT (Denzin & Lincoln, 2011). Indeed, while much attention has been paid in the past to quantitative research, arguably this has been at the expense of a deeper understanding of the phenomena under study, especially in subject areas that involve the investigation of real-life events and human interactions (Easterby-Smith et al., 2002). It has also been argued that organizational studies in academic research offer no practical guidance to practitioners (Daft & Lewin, 1990); therefore, "*more inductive, theory-building studies, using empirical data to build theories which are useful, relevant and up-to-date*" (Partington, 2000, p. 91), are needed.

This situation has also led to an increase in qualitative studies in management research in recent decades, such as case study research, which can provide a better understanding of real-world events (McCutcheon & Meredith, 1993). However, this does not seem to be the case for GT studies. A search for the term "*grounded theory*" in Scopus returned 24,086 results,[1] a number that has been constantly increasing since the creation of the methodology; yet only 7% (2,565 studies) of these studies were in the "*business and management*" category (Figure 1). It should be noted that a similar search for the term "*case study*" returned 788,460 results, from which 78,603 studies, significantly more than those using GT, were relevant to business and management studies.

At the same time, the validity of qualitative studies has also been criticized on the basis of their unstructured nature and the subjectivity involved (see, for example, Easterby-Smith et al., 2002). Different solutions have been recommended in the extant literature to deal with this weakness, such as the use of mixed methods (e.g., Opoku et al., 2016), the support of the chosen methodology through a detailed research protocol (e.g., Yin, 2003), or the support of a study through a systematic literature review (e.g., Tranfield et al., 2003). All these

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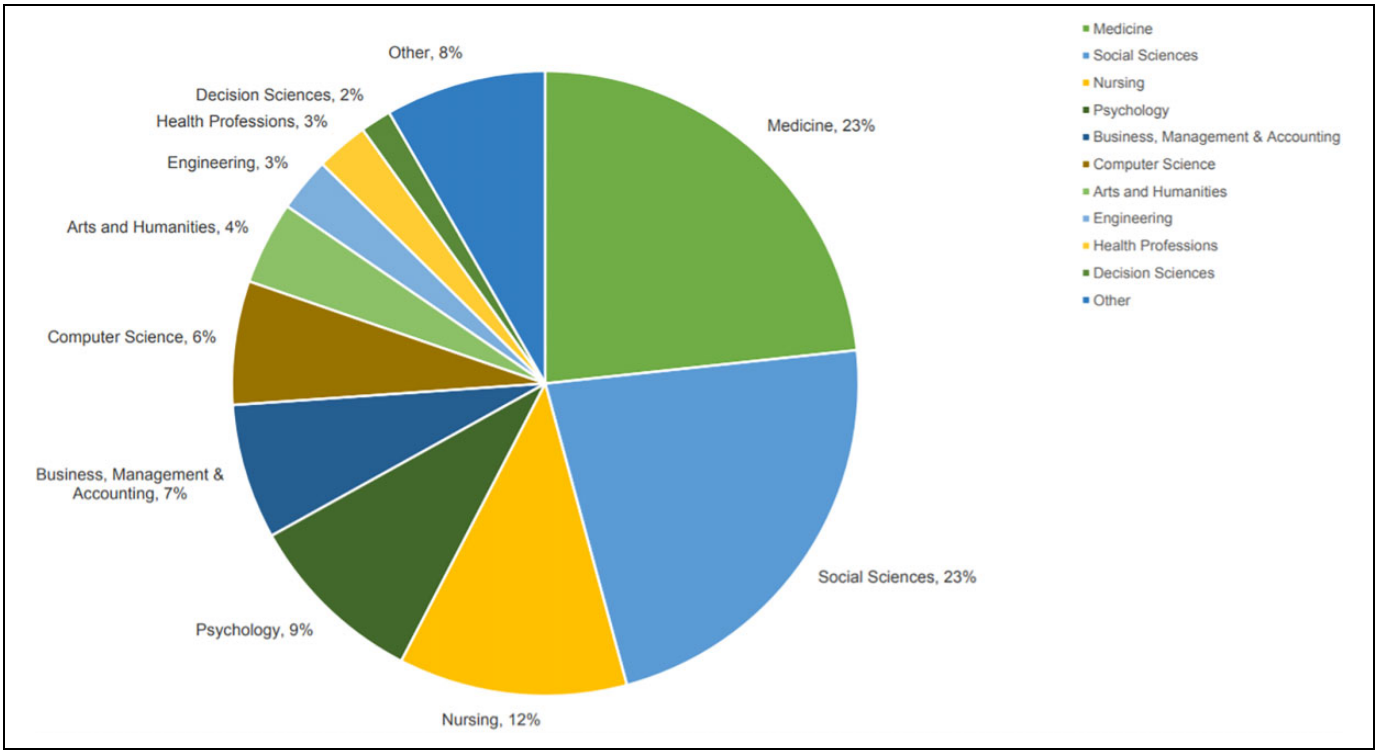

Figure 1. Scopus search results for "grounded theory" by subject.

approaches require the identification of a specific research gap within the literature review. The traditional method of "*gap-spotting*," however, has also been criticized, as it can lead "*to a shortage of really interesting and influential studies within management science*" (Alvesson & Sandberg, 2011, p. 266).

GT, as introduced in 1967 by Glaser and Strauss, offers a compromise between the two. Specifically, researchers are now advised to start collecting data from the outset in order to obtain a deeper understanding of real-life problems, and before proceeding with a more detailed literature review and identification of specific research questions. Importantly, the GT approach allows researchers "*to make statements about how actors interpret reality*" (Suddaby, 2006, p. 636), while providing the opportunity to use both quantitative and qualitative data. Put simply, the researcher has the opportunity to "*see*" the research problem through the eyes of the practitioners, rather than through a gap-spotting analysis of the literature, thus providing more practical and targeted solutions. Although the extent of the literature review conducted before focusing on a more particular research scope depends on which GT approach the researcher decides to follow, it is generally accepted that grounded theorists should focus on what arises from the data, and data only, by delaying the literature review (Charmaz, 2006). More about the differences between the various approaches to GT are presented later in this paper.

Indeed, despite its increasing popularity, due to the numerous variations in the methodology "*it is no longer possible to tell precisely what researchers have done methodologically when they say they used 'grounded theory methods'*" (Corley, 2015, p. 601). Notwithstanding its potential benefits, it is therefore particularly challenging for researchers to take this journey, since it is undoubtedly far from easy to understand the process and which of the methodology's variation is the most appropriate for a study. To understand which approach best fits a study, it is important to understand not only its history but also the main arguments within the literature. Indeed, choosing the most suitable methodology for a study is potentially both the most important and most difficult part of the research process (Opoku et al., 2016). The choice should depend on various parameters, such as the state of the relevant literature, the research objective, the resources available, and the researcher's philosophical view (e.g., Easterby-Smith et al., 2002; Edmondson & McManus, 2007; Saunders et al., 2009). A better understanding of the evolution and variations that GT has undergone over the years will therefore allow researchers to have a better understanding of the methodology, in addition to the different ways that it can be used. Most importantly, this will allow them to decide whether GT is the best fit for their study and how to implement it.

This paper begins by providing an overview of different research strategies before focusing explicitly on exploratory studies and the GT approach. The study further provides a historical overview of the different approaches to GT, social constructionism as a methodological fit, data collection and analysis methods, and the recommended research quality and validity criteria. Within these sections, we also discuss the different arguments within the literature. Finally, this paper presents the challenges inherent in designing, undertaking, or reviewing GT research in management studies.

Table 1. Opposing Views of Positivism and Social Constructionism.

	Positivism	Social Constructionism
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Explanations	Must demonstrate causality	Aim to increase general understanding of the situation
Research progresses through	Hypothesis and deductions	Gathering rich data, from which ideas are induced
Concepts	Need to be operationalized so they can be measured	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to simplest terms	May include the complexity of the whole situation
Generalization through	Statistical probability	Theoretical abstraction
Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Note. This table was adopted from Easterby-Smith et al. (2002, p. 30).

An Overview of Different Research Strategies

According to the Oxford Living Dictionaries, research is "*the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.*"[2] Research has the aim of making contributions to theory (Sutton & Staw, 1995), either through theory testing or theory building (e.g., Colquitt & Zapata-phelan, 2007; Saunders et al., 2009). There are many different strategies that can be used to conduct research. For example, research can be quantitative or qualitative. The former is more suitable when the aim is to describe, code, or count events (Easterby-Smith et al., 2002), while the latter is more suitable when the aim is to explain "*social events as experienced by individuals in their natural context*" (Malterud et al., 2001, p. 397).

Research can also be exploratory, descriptive, or explanatory. The classification of research into one of these categories depends on the purpose of the study. Saunders et al. (2009) explain that the purpose of exploratory research is to find out "*what is happening*," "*seek new insights*," and "*assess phenomena in new light*" (Saunders et al., 2009, p. 139). In contrast, the purpose of a descriptive study is to provide an accurate description of a person, event, or situation, while that of an explanatory study is to establish the relationships between different variables. Considering that theory is not just a list of factors, characteristics, or concepts, but it should also explain how and why these factors fit together, as well as the connections, relationships, and timings between phenomena and events (e.g., Sutton & Staw, 1995; Whetten, 1989), these types of research are not necessarily mutually exclusive. A descriptive study, for example, can be the extension of an exploratory or an explanatory research (Saunders et al., 2009).

Research can also be inductive, deductive, or abductive. In inductive research, the researcher starts by collecting data and analyzing them in order to guide any subsequent work (Saunders et al., 2009). This approach is more suitable for theory building and in cases where little or no previous theory exists (Edmondson & McManus, 2007). The authors call this type of research "*nascent research.*"

In deductive research, existing theory is used in order to formulate the research questions or hypotheses, which are then used to organize and guide any subsequent data collection and analysis (Saunders et al., 2009). The deductive approach is more appropriate for theory testing. The combination of inductive and deductive research is called abductive research and refers to "*the process by which a researcher moves between induction and deduction while practicing the constant comparative method*" (Suddaby, 2006, p. 639). Thus, the abductive approach is common when inductive research progresses and the researcher seeks to develop, and later test, the developed theory (Saunders et al., 2009). In the context of GT, Creswell (2012) refers to this process (of comparative method) as "*zigzagging.*" He describes it as the process of moving back and forth between the data collection and analysis, in order to reveal "*clues*" or "*underdeveloped categories*" and inform subsequent data collection (Creswell, 2012, p. 433).

Exploratory Studies: Methodological Fit

Saunders et al. (2009) present seven different research strategies and suggest that more than one can be used for exploratory studies (i.e., experiment, survey, case study, GT, and archival research), but they argue that the final choice should also depend on the researcher's own philosophical positioning. Indeed, several authors have argued that understanding one's values, and the way in which they view the world, can have a major impact on the quality of a management study (see, for example, Easterby-Smith et al., 2002; Guba & Lincoln, 1994; Saunders et al., 2009). In more detail, understanding one's philosophical positioning is extremely important, as it can help researchers to refine their research design by considering not only the type of evidence required to answer their research questions, but also how this evidence should be gathered and interpreted (Easterby-Smith et al., 2002).

To define the most appropriate research method for a study, an author must consider alternative philosophies of social science. For example, Easterby-Smith et al. (2002) present an analysis of *positivism*, *relativism*, *critical realism*, and *social constructionism*, with positivism and constructionism being the two most opposing views. The differences between the two are presented in Table 1. The key issue between the different debates relates to the epistemology and ontology of each philosophical approach. Epistemology refers to "*the researcher's view regarding what constitutes acceptable knowledge*,"

Table 2. Comparison of Philosophical Views in Management Research.

	Positivism	Relativism	Critical Realism	Social Constructionism
Methods	Quantitative	Compromise between positivism and social constructionism		Qualitative
Epistemology: a set of assumptions about the best way of inquiring into the nature of the world	The social world exists externally, and its properties should be measured through subjective methods	Different observers have different viewpoints		Human interests are the main drivers of science, and meanings are subjective
Ontology: assumptions that we make about the nature of reality	Reality is external and objective	Reality depends on the viewpoint of the observer		Reality is socially constructed and subjective and may change

Note. This table was adjusted from Easterby-Smith et al. (2002) and Saunders et al. (2009).

Table 3. Summary of Theory, Research Type, and Philosophical Positioning Adopted in This Study.

	Nascent Theory	Exploratory Research
Type of data collected	Qualitative, initially open-ended data that need to be interpreted for meaning	Qualitative, open-ended data
Data collection methods	Exploratory interviews with organizational informants or experts in the subject matter	In-depth or semi-structured interviews to find out what is happening and seek new insights, observations, and documents from field sites
Data analysis methods	Thematic content analysis for pattern identification	Qualitative analysis methods

Note. This table was adjusted from Easterby-Smith et al. (2002), Edmondson and McManus (2007), and Saunders et al. (2009).

and ontology refers to "*the researcher's view of the nature of reality*" (Saunders et al., 2009, p. 119). A more detailed description of the characteristics of the different views is presented in Table 2.

Table 3 summarizes and compares the type of data, data collection, and analysis methods suggested by different authors for nascent theory and exploratory research studies. As presented in this table, the proper type of data is qualitative, and the most suitable data collection methods are exploratory, in-depth, or semi-structured interviews, analyzed using thematic content analysis.

Thus, based on the information presented in Table 3, the type of data required for both qualitative and nascent theory studies is qualitative.

In the literature there are contradictory views about which methodology is best suited to exploratory studies that seek to build theory. Eisenhardt (1989) and Yin (2003) suggest that case studies are the most appropriate methodology, while Glaser and Strauss (1967), Glaser (1978, 1992), Strauss (1987), and Strauss and Corbin (1998) recommend the use of GT.

Gustafsson (2017) defines case studies as "*an intensive study about a person, a group of people or a unit, which is aimed to generalize over several units.*" Gerring (2004) provides a similar definition and further argues that the case study methodology is "*not a way of analyzing casual relations*" (Gerring, 2004, p. 341). In contrast, GT is ideal for exploring social relationships (Mfinanga et al., 2019). Creswell defines GT as "*a systematic, qualitative procedure used to generate a theory that explains, at a broad conceptual level, a process, an action, or an interaction about a substantive topic*" (Creswell, 2012, p. 423), in cases were existing theories cannot address the research problem.

Table 4. Comparison of Case Studies and Grounded Theory.

	Case Studies	Grounded Theory
Suitable for qualitative research	✓	✓
Suitable for exploratory research	✓	✓
Suitable for theory building	✓	✓
Suitable for interpretivist research	✓	✓
Requires theoretical propositions (or pre-identified) research questions	✓	×

Indeed, while the two approaches are very similar, the main difference (and purpose) of using the GT approach is the absence of any research questions or propositions. Table 4 summarizes the similarities and differences between the two.

Indeed, especially for nascent theory research, where very little is known about the issues that may arise from the data, we recommend not only avoiding the use of any propositions but also using qualitative data to help with the introduction of new constructs (Edmondson & McManus, 2007). Using case studies requires the formulation of specific research questions and study propositions (Yin, 2003). According to Yin (2003, p. 22), only "*if you are forced to state some propositions will you move in the right direction.*"

The Grounded Theory Approach

History and Overview

Even though there is no single approach to GT, and the methodology has undergone many changes since it was first

introduced by Glaser and Strauss in 1967 (Cho & Lee, 2014; Easterby-Smith et al., 2002), most authors agree that it has the ability to introduce new concepts, as these emerge directly from the data without forcing any leads. As Glaser (1998) points out: "*The grounded theorist has no preconceived view of what problems they may encounter in the research or how the participants resolve their problem or main concern . . . He sees that forcing only derails and fails this purpose. He does not let the normal instructions of forcing stop him*" (Glaser, 1998, p. 119). This view is reinforced by Corley (2015), who points out that: "*it's not unexpected that all the powerful examples of grounded theory research we have in our field do not all look the same and have not all followed Glaser and Strauss's (1967) original GT prescriptions to their precise letter. What these papers do have in common is that all have faithfully followed the spirit of the GT approach and done nothing to violate any of its main tenets*" (Corley, 2015, p. 604).

Indeed, GT has largely evolved since its first introduction by Glaser and Strauss in 1967, and it has many variations, depending on which author is using it (e.g., Cho & Lee, 2014; Easterby-Smith et al., 2002). For example, as a result of the numerous changes and forms that the methodology has undergone since its first introduction in 1967, it has been argued that "*the term grounded theory has taken on a life of its own*" (Corley, 2015, p. 601). Therefore, when deciding to use GT to conduct research, it is important to understand its origins, history, and the main arguments that exist within the literature.

As with most elements of the GT methodology, there are several arguments regarding its philosophical positioning (see, for example, Holton, 2008, for an extended discussion regarding the GT epistemological and ontological perspective). While Glaser supports the idea that GT is "*a systematic research method*" (Glaser, 1998, p. 62) that can support any philosophical view that the researcher has embraced (Holton, 2008), others argue that GT is best suited to inductive studies, with "*little theoretical understanding*" (Corley, 2015, p. 601). While the author keeps an open mind and suggests that further changes and improvements in the methodology can allow it to be used equally for deductive studies, he argues that currently "*the best GT research has to offer will be found in inductive research from a non-positivistic perspective*" (Corley, 2015, p. 604).

In order to understand some of the other arguments surrounding GT research, it is also important to clearly define the different terms that are being used. For example, many studies use the terms "*research method*" and "*research methodology*" interchangeably (Saunders et al., 2009). We recommend however, using the term method to refer to an individual tool or technique used for a specific reason, such as data collection or data analysis (Easterby-Smith et al., 2002). For instance, an interview is a method used for collecting data, while content analysis is a method used for analyzing the collected data; meanwhile, the term methodology should be used to describe the combination of methods (or tools and techniques) used to guide the researcher's practices in order to undertake this research. Put simply, methodology is the justification for selecting a particular method, or a combination of methods (e.g., Easterby-Smith et al., 2002; Saunders et al., 2009).

Despite the various differences, the main debate remains between the methodology's two creators. For example, Glaser has remained faithful to the initial approach of GT (Heath & Cowley, 2004), arguing that the researcher should follow an open and flexible process, where the theory emerges directly from the data, and where the data resolves around the main concern of the actors involved (Corley, 2015; Easterby-Smith et al., 2002; Glaser, 1978, 1992, 1998, 1999). Indeed, according to Glaser (1998), researchers should stop worrying about "*doing it right*," and start working on it, while naturally following the data instead of focusing on the technique (Heath & Cowley, 2004, p. 149). What is more, the GT researcher should be imaginative, courageous, and creative (Easterby-Smith et al., 2002) and have the "*ability to tolerate confusion*" (Glaser, 1999, p. 838). Glaser believes that the researcher should start with no propositions, or a previous search of the literature (e.g., Easterby-Smith et al., 2002; Glaser, 1978, 1992, 1998; Heath & Cowley, 2004). The more flexible approach proposed by Glaser is often referred to as the "*Glaserian*" or "*classic*" view (see, for example, Glaser & Holton, 2004; Howard-Payne, 2016; Wiesche et al., 2017).

On the other hand, Strauss proposes a more structured approach (e.g., Corbin & Strauss, 1990; Strauss, 1987; Strauss & Corbin, 1998), and, as a result, the "*Straussian*" view has been criticized by Glaser as no longer being GT but rather a new methodology that often forces data into categories (e.g., Cho & Lee, 2014; Easterby-Smith et al., 2002; Glaser, 1992; Heath & Cowley, 2004). Based on the Straussian view, the researcher should become familiar with any pre-existing research in order to be able to generate theory (Easterby-Smith et al., 2002). The more "*mechanistic*" view of GT recommended by Strauss led others to argue that the Straussian view is a small move toward positivism (see, for example, Easterby-Smith et al., 2002; Suddaby, 2006).

Social Constructionism

In order to remain faithful to "*the heart and soul of GT methodologies* [which] *lies in engaging a phenomenon from the perspective of those living it*" (Corley, 2015, p. 600), this paper focuses on providing a guide for conducting GT research, in exploratory, social constructionism studies.

Social constructionism is an interpretivist approach and "*. . .focuses on the ways that people make sense of the world especially through sharing their experiences with others via the medium of language*" (Easterby-Smith et al., 2002, p. 29). In contrast to the positivist view, where "*the researcher is independent of the data and maintains an objective stance*" (Saunders et al., 2009, p. 119), in social constructionism "*the observer is part of what is being observed*" and "*the reality is not objective and exterior*" but "*it is given meaning by people*" (Easterby-Smith et al., 2002, p. 29). The researcher should not, therefore, look for external causes to explain different behaviors, but instead, aim to understand why individuals behave in

different ways based on their unique experiences (Easterby-Smith et al., 2002). It is therefore recommended, that the sampling process for social constructivist studies should include a small number of cases, chosen for specific reasons: for instance, a small number of in-depth interviews with experts in the field, or individuals directly involved in the phenomenon under study (Easterby-Smith et al., 2002; Edmondson & McManus, 2007; Saunders et al., 2009; Starks & Trinidad, 2007). In GT, and in qualitative research more general, it is recommended that sample size should be determined based on reaching theoretical saturation and the type of research. While there is no definite number, and each project is different, in GT an average of about 30 interviews (or cases/informants) should work for most projects (Corbin & Strauss, 2015; Sim et al., 2018; Thomson, 2010).

Data Collection Methods

Glaser argues that "*all is data*" (Glaser, 1998; Glaser & Holton, 2004; Holton, 2008), and researchers should make the best of whatever data is available, including information from previous studies or other researchers:

> "*Built into the grounded theory methodology are motivational pulls at virtually every stage of the project. First, if the researcher is using a cache of data, whether from the library or secondary analysis of others' data, it is exciting to mine such a treasure where others had not gotten far. Most research consists mainly of a few generalizations from it. Grounded Theory has virtually carte blanche in analyzing existing data. The challenge and opportunity is great and fun. What was an overwhelming pile of data to the original collector becomes a joyous treasure to the grounded theory analyst.*" *(Glaser, 1998, p. 60)*

To this end, data collection can come from various sources. For example, observation is important when research is looking into human behavior (Walshe et al., 2012). During the observation, it is important that researchers also take field notes, that can be used not only as their personal thoughts, but as an "*additional layer of data*" (Phillippi & Lauderdale, 2018, p. 381). Interviews are also useful for collecting data for GT studies. According to Burgess (1982, p. 107), an interview is "*the opportunity for the researcher to probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on personal experience.*" They are also particularly useful when the topic is confidential or sensitive, as many individuals often prefer talking to an independent (and external to the organization) party about their experiences (Easterby-Smith et al., 2002). The interviews can be structured, semi-structured, or unstructured (in-depth), depending on the type of research problem and research questions (Saunders et al., 2009). According to Leavy (2014), although there can never really be a completely structured or completely unstructured interview, it is more helpful to consider them as a continuum with semi-structure interviews somewhere in the middle. Structured interviews are most often used in surveys and are similar to questionnaires (Leavy, 2014). Unstructured interviews have no pre-identified questions and are recommended for field-work or ethnography research were participants are expected to discuss the topic in their own way (Jamshed, 2014). In semi-structured interviews, although there is a pre-identified guide with open-ended questions, the researcher has the flexibility to improve them, or change direction, as new themes emerge and the research progresses (Jamshed, 2014). As presented in Table 3, for exploratory and nascent theory studies, data are most often collected with unstructured or semi-structured interviews (Saks & Allsop, 2012; Starks & Trinidad, 2007). These allow interviewers to gain new insights, and a deeper understanding of the phenomenon under study and the relationships between the emerging themes (Saunders et al., 2009), since they allow the flexibility to explore the topic and delve further into these (Saks & Allsop, 2012).

According to Silverman (2010), by following the participants' leads during the discussions, using open-ended questions can uncover elements that were not previously considered. Therefore, while it is also recommended to use a predefined set of questions that have already been tested in other studies, they should only be used as a guide (Easterby-Smith et al., 2002; Saks & Allsop, 2012; Silverman, 2010). The confidentiality of the participants and external nature of the interviewer can further reveal new themes and uncover issues not previously considered within an organization.

Despite of which data collection method GT researchers decide to follow, the process must be supplemented by what Glaser (1998, p. 184) calls "*memoing*" (see also, Bryant, 2017, "*move quickly through data*" guideline; Charmaz, 2006):

> "*At the start the researcher faces virtually one large pile of memos. He should enter the pile anywhere, no matter, and pick a memo. Place the memo somewhere on a table; it does not matter where. He should usually choose a large table, like a dining table. It is important to have lots of space. Then pick another memo and see by comparing how it is related to the first one picked. Upon comparison they will relate empirically in some fashion like the substantive area is integrated.*"

While memoing is a process similar to the one of taking field notes, it is an essential process in the GT methodology as it can support researchers "*in making conceptual leaps from raw data to those abstractions that explain research phenomena in the context in which it is examined*" (Birks et al., 2008). Memos should be written throughout the course of the research to support any other data collection method selected, by comparing data, exploring the researchers' ideas, and guiding any subsequent data collection cycles (Charmaz, 2006).

The sampling process for GT studies should involve purpose sampling and the recruitment of organizations and participants that are experts in the subject matter, or which are directly involved in the research problem (e.g., Easterby-Smith et al., 2002; Edmondson & McManus, 2007; Saunders et al., 2009; Silverman, 2010). In GT this process of sampling is called

Table 5. Different Approaches to Conducting Grounded Analysis.

	Glaser & Strauss (1967)	Corbin & Strauss (1990, 1998)	Glaser (1992, 1998)
Initial coding	**Stage 1:** Comparing incidents applicable to each category	**Open coding:** – Use of analytical technique – Sampling of people, places, and situations that will provide the best opportunities for collecting relevant data	**Substantive coding:** Data-dependent
Intermediate phase	**Stage 2**: Integrating categories and their properties	**Axial coding:** – Reduction and clustering of categories (paradigm model) – Focused sampling of people, places, and situations that will provide opportunities to gather data about the properties and dimensions of the categories, as well as how the categories are related to one another	Continuous with previous phase, comparisons with focus on data, become more abstract, categories refitted, emerging frameworks
Final development	**Stage 3:** Delimitating the theory	**Selective coding:** – Detailed development of categories, selection of core, integration of categories – Very focused and deliberate sampling of people, places, and situations that will fill in and refine the story line of the core categories and the proposed relationships between categories	**Theoretical coding:** Refitting and refinement of categories that integrate around emerging core
Theory	**Stage 4:** Writing the theory	Detailed and dense process fully described	Parsimony, scope, and modifiability

Note. This table was adjusted from Easterby-Smith et al. (2002) and Heath and Cowley (2004).

theoretical sampling, and the selection of participating organizations and individuals includes cases that are most representative of the phenomenon under investigation (Corbin & Strauss, 1990; Glaser, 1998; Starks & Trinidad, 2007). In accordance with the GT approach, both primary and secondary data can be used to address the research problem of a study (Glaser, 1998). In addition to the interviews, the researcher can use, for instance, archival documents, such as internal reports or news reports. These can be used either to supplement and compare information collected during the interviews or as the basis for selecting the most suitable candidates, or narrowing down the scope of the research, before proceeding with further data collection.

Data Analysis Methods

The second major debate in GT research is related to the method that can be used for data analysis. Table 5 summarizes the main stages of data analysis, depending on which view the researcher decides to adopt. As shown in this table, Strauss and Corbin (1998) describe a process of open, axial, and selective coding, while Glaser (1998) proposes a process of substantive and theoretical coding.

According to a number of studies, however, the proper method for data analysis when using GT is qualitative content analysis (see, for example, Clancy & Vince, 2019; Edmondson & McManus, 2007; Suddaby, 2006). According to these studies, GT is an overall methodology suitable for nascent theory studies, while content analysis is one of multiple methods that can be used for analyzing data when using GT. Nevertheless, some scholars argue that content analysis and GT are different approaches. For instance, Easterby-Smith et al. (2002) distinguish between grounded analysis and content analysis. They describe seven distinct stages in order to make the GT process more understandable, but without specifically supporting a Glaserian or Straussian view. They present content analysis as a different method for analyzing qualitative data without directly comparing it to grounded analysis. Hsieh and Shannon (2005, p. 1278) present GT and content analysis as two *"of numerous research methods* [used] *to analyze text data.*" Indeed, as Urquhart et al. (2010) argue, GT has often been used as a coding method and not as a complete methodology. Finally, Cho and Lee (2014) do not make the distinction between method and methodology, but argue that the main difference between the two depends on whether the researcher wants to identify the relationship between categories and generate theory. If this is the case, then it is recommended to use GT, whereas if the researcher is interested in identifying a list of categories (or themes and components), it is recommended to use content analysis. Finally, according to Bryant (2017), different GT researchers can have different approaches to data analysis as long as they follow Charmaz's (2006, p. 49) coding guidelines: *remain open, stay close to data, keep your codes simple and precise, preserve actions, compare data with data*, and *move quickly through the data*. After all, at its core GT is an open and flexible methodology (see also, Corley, 2015).

Table 6. Grounded Theory Coding Guidelines.

Remain open	Remain open to new ideas, avoid using experience and pre-existing knowledge when coding
Stay close to data	Coding must clearly derive from the data and not from previous experience or knowledge of the researcher
Keep your codes simple and precise	Avoid using lengthy codes, and include longer explanations in the memos
Preserve actions	Distinguishing the coding process in "*topics and themes*," and "*thematic coding*" is not necessary
Compare data with data	Use constant comparison to avoid the list of codes becoming unmanageable
Move quickly through data	Keep field notes and memos, use them for analysis, and frequently revisit them

Note. This table is based on the guidelines presented in Bryant (2017, pp. 175–176).

Table 7. Three Approaches to Content Analysis.

Type of Content Analysis	Study Starts With	Timing of Defining Codes or Keywords	Source of Codes or Keywords
Conventional content analysis	Observation	Codes are defined during data analysis	Codes are derived from data
Directed content analysis	Theory	Codes are defined before and during data analysis	Codes are derived from theory or relevant research findings
Summative content analysis	Keywords	Keywords are identified before and during data analysis	Keywords are derived from the interest of re-searchers or the literature review

Note. This table was adopted from Hsieh and Shannon (2005, p. 1286).

A more detailed description of Charmaz's concepts is presented in Table 6.

Depending on the type of research project, researchers can decide to follow different guidelines. For example, Urquhart et al. (2010) recommend the following for studies in information systems: *constant comparison, iterative conceptualization, theoretical sampling, scaling up*, and *theoretical integration* (Urquhart et al., 2010, p. 369). In spite of which set of guidelines researchers decide to follow, the two main characteristics of data analysis in GT are the constant comparative analysis between the data and the literature, and the use of memos throughout the whole process in order to uncover not only a list of categories, but also the relationship between them and to generate theory. As GT requires, data analysis should begin soon after the first data are available by studying the interview transcripts for emerging themes, and by constantly comparing and updating them. Nevertheless, as Corley (2015, p. 602) describes:

> "*Yes, I very much agree that there are key components to the methodology—emergence, theoretical sampling, constant comparison (as Holton describes), open coding, selective coding, memoing (as Glaser explains)—that must be used in conjunction to have the best chance at truly uncovering novel and theoretically interesting patterns in the data. But I don't agree there is one best sequence to follow in deploying those techniques, nor do I believe that effective GT research can be anything other than cyclical, reciprocal (almost by definition, if you take Glaser's and Strauss's descriptions of constant comparison to heart), and even a bit messy.*"

Therefore, regardless of which method researchers decide to use, they should remember that remaining faithful to the initial values of the methodology of being open and flexible is more important than following a pre-specified sequence of steps and guidelines, since GT is, in essence, *cyclical* and untidy.

Especially in the case that the initial motivation of a researcher for selecting GT as the best methodological fit is to avoid using any propositions, coupled with the fact that there may be no previous theory to support the methodology for their study, we recommend using a more flexible approach, as suggested by Heath and Cowley (2004), using frequent recoding cycles instead of having a clear distinction between substantive and theoretical coding. This process can facilitate the development of the categories from the data and data only, allowing the concerns of the participants to emerge. More specifically, we recommend the use of both conventional and directed content analysis, as defined by Hsieh and Shannon (2005), depending on the stage of the study.

A detailed definition of the different types of content analysis is presented in Table 7.

Researchers can code their data either manually or by using a computer-assisted qualitative analysis software (CAQDAS). As with every element of qualitative research, there is "*no size fits all*" solution, and both have pros and cons. According to St John and Johnson (2000) decision should be based on a number of criteria such as the researcher's capabilities, the available time, and the type of data, among others (see also, St John & Johnson, 2000, Table 1, p. 397). Due to the iterative process that GT requires however, we recommend that researchers opt for a CAQDAS, such as NVivo®. Using CAQDAs can support the researchers in a number of ways. To begin with, GT supports the use of data from multiple sources and in different forms, for example, both primary and secondary, and qualitative and quantitative data can be integrated, among others. The use of memos is also very important. Collating all the different types of data manually can be a challenging task for researchers. Using a CAQDAS, can support the collation of different

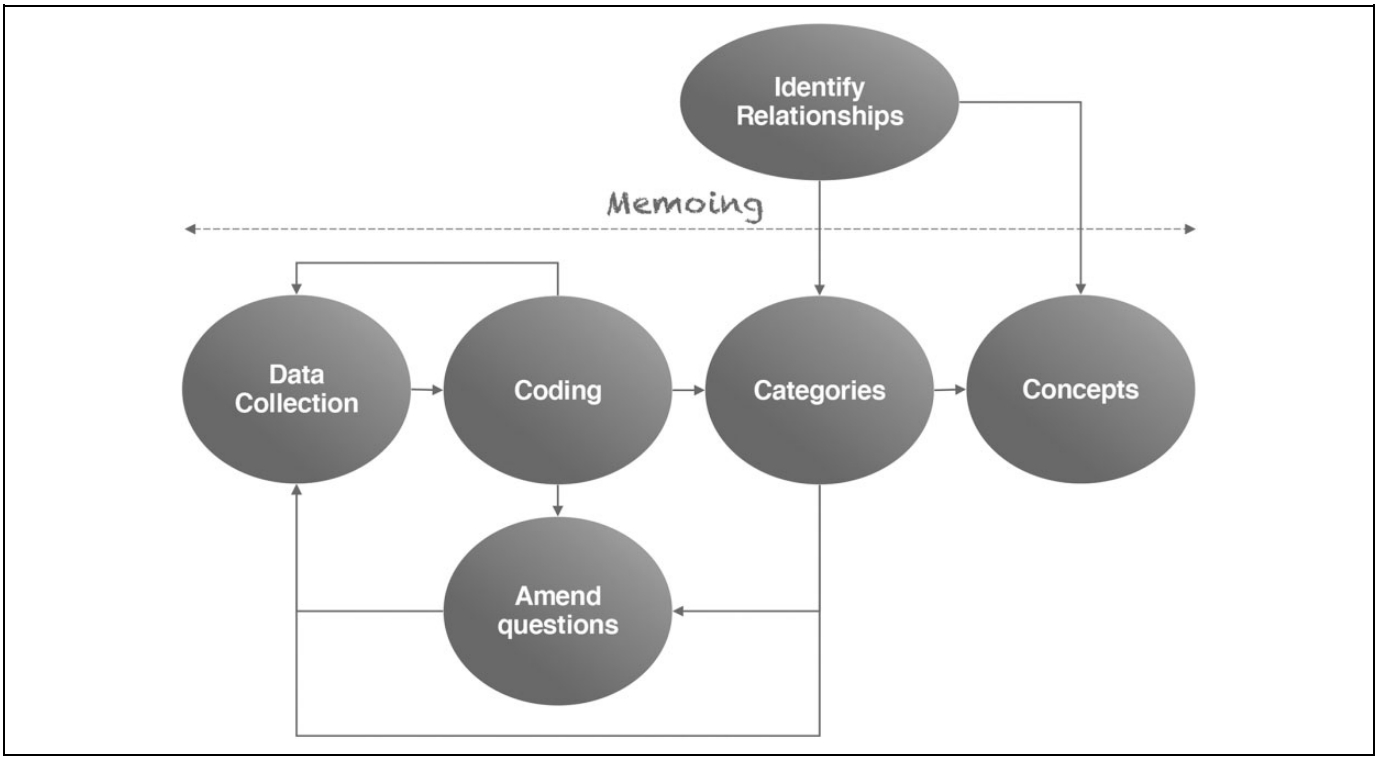

Figure 2. Data analysis process.

types of data, including memos, and the iteration between the different coding stages. CAQDAS also provide visual support that can make the relationships between the codes more visible (e.g., the use of tree nodes in NVivo®). Furthermore, the search function can help with verification of the results. For example, by searching for specific words the researcher can verify if all the relevant text has been attributed to the right nodes. Bringer et al. (2006) provide an extended discussion, with examples, regarding the use of (CAQDAS) in a GT project. It should be noted however, that opting for a CAQDAS solution, does not mean that the software will perform the analysis for the researcher. Analysis of data still falls under the responsibility of the researcher and the software can only support this process.

Finally, we recommend that, where possible, interviews are recorded and transcribed later. While transcription can take place during the interview, it is more important to focus on the discussion and taking memos. Transcribing one's own interviews, soon after they are completed, is also recommended. This process will allow for a deeper understanding of the discussions. Professional transcription is also an option, but we recommend that the service is selected from an approved list of suppliers and that a sample of the transcriptions' quality is checked against the original audio to ensure their quality (Poland, 1995).

Although we recommend that researchers follow the approach that best suits their style and philosophical approach, the following section provides a guide for those who choose to use content analysis.

The Qualitative Content Analysis Process

According to Charmaz (2006), data analysis should begin soon after the researcher collects the first data. The analysis should begin with the researcher reading each transcript or document carefully, highlighting any relevant text. It is important to start the analysis as soon as possible and not to wait for data collection to be completed. After working through the first transcripts, the researcher should re-read the highlighted text (references) more carefully and attempt to assign each to a "code." Following this process, the first step must be repeated for more transcripts, in order to assign more to one of the emerging codes. In cases where the new data could not be matched with a pre-existing code, the researcher should assign new ones. The same steps should be followed iteratively until all transcripts have been coded (Figure 2). This process aligns not only with Charmaz's "*constant comparative method*" but also with Creswell's "*zigzagging*" approach and allows enough flexibility for the researcher regardless of which GT approach they decide to follow. In contrast to surveys and case studies where it is not recommended to change the questions (e.g., interview or survey questions, see, for example, Yin, 2003) during the data collection and analysis phases, in GT studies the researcher should review and improve/amend their questions if necessary. As mentioned previously, during the interviews, interview questions should only be used as a guide for the discussion, and additional questions should be asked in order to help reveal the emerging themes.

The process can be further supported by the use of mind maps. For example, all the coded references can be added in a mind map, created during the memoing process, and mapped against the assigned codes. Some of the codes will be grouped in the same category, while others which may seem to fit into more than one category, should be moved to different ones until all the codes have been mapped against at least one of the final categories (see, also, Figure 2). In his coding manual, Saldaña (2013) proposes using a process more similar to the Straussian approach and recommends the use of six methods as part of GT coding. These are: *In Vivo, Process, Initial (or Open), Focused, Axial, and Theoretical (or Selective) Coding*. He also emphasizes the use of analytic memos throughout the process. The process we recommend however, as presented in Figure 2, is more similar to Saldaña's "*streamlined codes-to-theory model*" as presented in Saldaña (2013, p. 13) and Saldaña (2016, p. 14). The process should always be supported by the use of memos.

During this process, the analysis, the mind map, and the different versions of the categories and concepts must also be presented to others, such as colleagues, academic conferences, or the organization(s) where the data were collected, in order to test the emerging concepts and their relationships, and to increase the validity of the final concepts. Including others in the analysis has two main benefits: first, it reduces bias introduced by the researcher; and, second, it can often help gain new insights, and therefore increase the validity of the research (Corbin & Strauss, 1990).

Research Quality and Validity

Charmaz (2006) proposes that the following criteria define the quality of GT research: data analysis must begin as soon as the first data have been collected in order to help improve subsequent data collection; themes must emerge from the data only, without the use of any preconceived hypotheses; and a constant comparative method must be used between the different data collection stages and the literature to ensure the generation of theory during each step of data collection and analysis (see also Table 6).

While these criteria should be used and reviewed frequently to ensure the quality of a study, four more criteria that enhance the quality and trustworthiness of quality research overall should be considered. These are recommended by Guba (1981) and include the following: credibility (or internal validity), transferability (or external validity/generalizability), dependability (or reliability), and confirmability (or objectivity).

Credibility refers to the extent to which the findings represent the views of the participants and not of the researcher. This can be addressed not only by remaining faithful to the criteria proposed by Charmaz (2006), but also through prolonged engagement with the participating organizations, as well as by collecting a variety of data from different sources (triangulation) and looking for contradictory, as well as confirmatory, views and themes, and finally through consulting both academic and industrial contacts and colleagues (see also, Cho & Lee, 2014; Petty et al., 2012; Starks & Trinidad, 2007).

Transferability, also called theoretical generalization (Yin, 2003), refers to the degree to which the findings can be used in other contexts. This can be addressed with a diverse sample of participants from different locations and sectors, by comparing and connecting the research findings with prior theory, and by explicitly outlining any identified limitations and recommendations for further research. It should be noted, however, that studies in management research, and especially studies looking into human behavior, are particularly complex and unique; or, as Saunders et al. (2009, p. 116) point out, "*they are a function of a particular set of circumstances and individuals coming together at a specific time.*" This has led some scholars to argue that it is the responsibility of those applying the findings to their own settings to test their transferability (Lincoln et al., 1985, as referenced by Petty et al., 2012).

Dependability is the extent to which the study can be repeated and replicated by another. Since the data are dynamic and largely depend on the time, location, and individuals involved, this can be addressed by detailed audit trails carried out by the researcher. In order to address this issue, the researcher should provide detailed explanations and descriptions of the processes, in addition to justification of their selection, and a variety of data samples, coding examples, photographs of the memoing process, and participants' quotes (see, for example, Barratt et al., 2011; Clissett, 2008; Yin, 2003, among others).

Confirmability is the degree to which the findings reflect the collected data. In other words, confirmability, or objectivity, should provide evidence that the researcher was not biased, and that the results emerged from the data only. The built-in GT process, with the constant comparative methods, is one of the key steps that can help to address this issue. The emerging themes and analysis methods should also be presented frequently (e.g., to academic conferences, to the participating organizations) in order to consult and request feedback. This process can help to further reduce bias and allow new insights to emerge (Corbin & Strauss, 1990).

The researcher should consider these criteria during both the formulation and execution of the research and take regular steps to reflect how trustworthy it is.

Challenges

As we have presented in this paper, there are several arguments in the literature regarding the use of GT methodology. This is because GT is, at its core, flexible and "*may be perceived differently by different researchers [. . .]. This situation has led over the years to the emergence of different streams of GT, which have tended to blur the overall scope and reach of GT*" (Walsh et al., 2015, p. 582). This can lead to a number of challenges, especially for less experienced researchers or those who have not used GT before.

The first, and perhaps most important, challenge a researcher will have to face is to understand the process of the methodology and decide whether this is the right approach for their research. Even those who are courageous enough to take

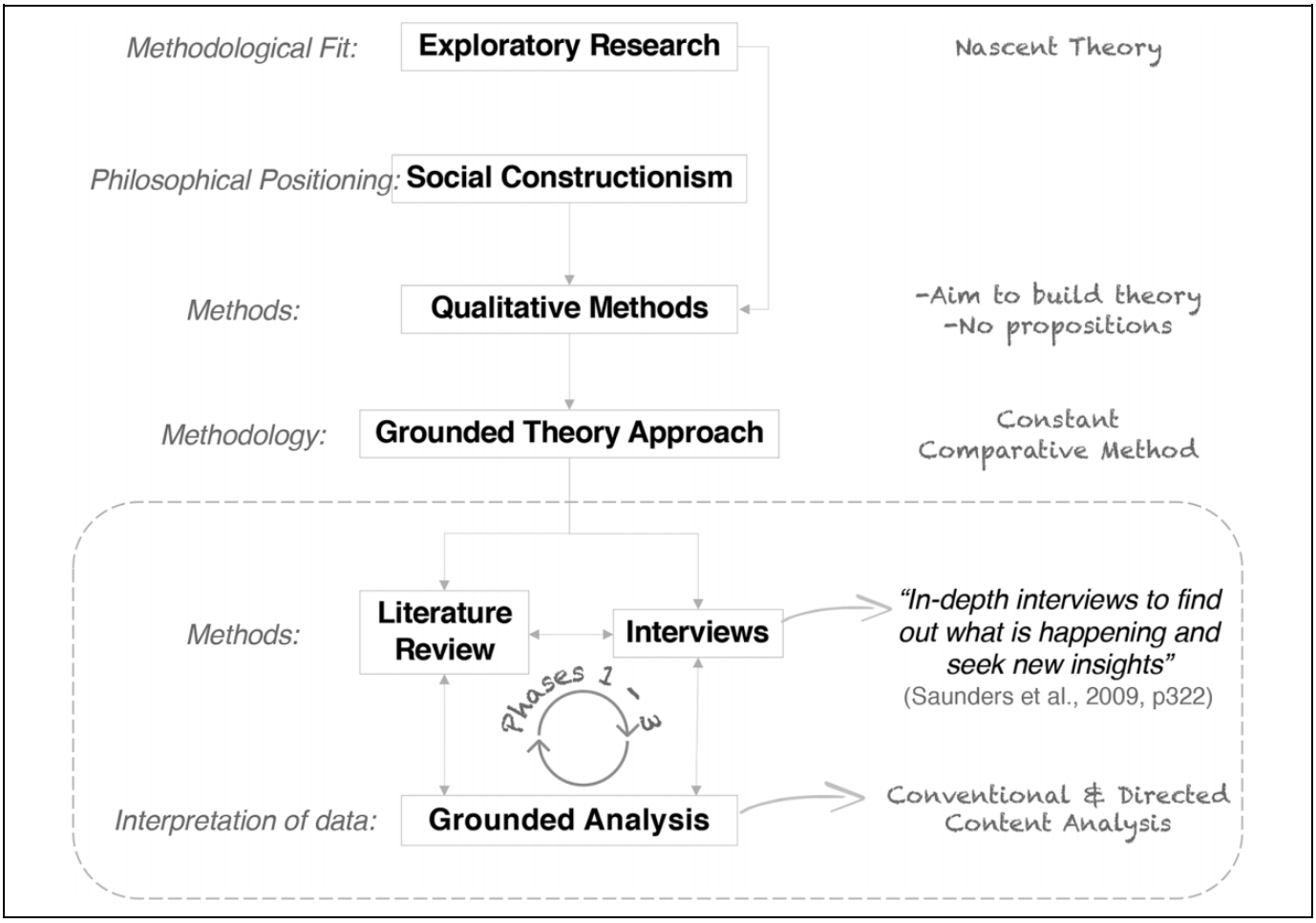

Figure 3. Research design.

on this journey must be well prepared "*[. . .] to tolerate confusion, hard work and the tedium of the constant comparative method and wait for concepts to emerge*" (Heath & Cowley, 2004, p. 144), and to vigorously defend their choice to potential reviewers and audiences.

Another one of the key challenges when using GT is the structure of theses and articles. Researchers are expected to follow a traditional structure in their texts, where data and findings follow the initial theoretical overview. The actual process of GT, however, is far less linear. The grounded approach of any research would require the reporting of a lengthy presentation of qualitative data and analysis, and a constant comparison between the different emerging categories long before the reader would have the opportunity to learn about the theoretical context of the research and its potential contributions. Thus, the literature review would have to follow the data presentation and findings chapter or be presented in parallel. It is, after all, in the nature of the methodology for the researcher to start collecting data in the first instance, to remain unbiased and open to themes emerging directly (and only) from the data, and not to be *"blocked by a preconceived problem, a methods chapter or a literature review*" (Glaser & Holton, 2004). As Glaser (1978) points out, any prior reading should focus on the general problem only, with more focused reading taking place when the emerging themes have been sufficiently developed (Heath & Cowley, 2004). As a result, presenting one's research in a traditional structure can be rather daunting, especially for unexperienced researchers. Even the more experienced reviewers tend to find it unstructured and confusing, especially if they are used to the more structured approach of case study research. Indeed, one of the unique characteristics of GT is this constant comparative analysis and theoretical sampling (e.g., Cho & Lee, 2014; Corbin & Strauss, 1990; Easterby-Smith et al., 2002; Glaser, 1992, 1998; Glaser & Strauss, 1967; Heath & Cowley, 2004; Starks & Trinidad, 2007; Suddaby, 2006), and great effort must be made in order not to distinguish between data collection, analysis, and interpretation (e.g., Easterby-Smith et al., 2002; Silverman, 2010).

The oral presentation of GT research (for example, in academic conferences, or viva examinations) can also be very challenging, since researchers are expected to follow the traditional "literature review—research gap and question—findings—discussion" structure. We therefore recommend that, while researchers should still follow the traditional structure

(especially in theses), they should clearly explain the cyclical process in their methodology chapter and support their text and arguments with a detailed research design, diagrams and graphs, and numerous quotes, while clearly explaining their choices and steps along their GT research journey. Researchers should also provide a detailed description of their data analysis and coding techniques in their methodology chapters, while also providing descriptive examples and detailed tables of how their codes have emerged and progressed over the course of their research (Suddaby, 2006).

Conclusion

This paper was motivated by the challenges faced by management researchers when applying the GT methodology, because of the various changes the methodology has undergone in recent decades. We began by providing an overview of the different research strategies before focusing on the GT methodology. We also provided a historical overview of the methodology's evolution and discussed social constructionism as a good methodological fit for GT studies. The paper builds on the idea that there is no single approach to the methodology.

Although we urge researchers to follow the approach that best suits their style and philosophical approach, the historical evolution, and the various arguments found in the literature and discussed here, can support researchers to make informed decisions.

We have also provided a guide for exploratory studies in management research, based on the arguments identified in the literature. This guide is particularly useful, both for researchers new to the GT approach and for examiners or reviewers of these studies. An overview of the recommended research design is presented in Figure 3.

Finally, we have recommended a set of quality and validity criteria for exploratory GT studies and presented the main challenges that researchers using GT should expect to face. Based on these, we recommend that, while a traditional structure should be followed in texts and presentations, the unstructured and iterative nature of the methodology should be clearly articulated and depicted, both in the methodology and data analysis chapters.

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Notes

1. Based on a search of the Scopus database using the term "*grounded theory*" in the title, abstract and keywords, performed on June 3, 2020.
2. Oxford *Living* Dictionaries: https://en.oxforddictionaries.com (accessed on 24/07/18).

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